

REMARKS

Upon entry of the present amendment, claims 6 and 12-25 are pending in this application. Claims 6, 14-15, 18-20 and 25 are amended. No new matter is added.

CLAIM REJECTIONS

35 U.S.C. § 112, Second Paragraph Rejections

Claims 6 and 12-25 are rejected under 35 U.S.C. §112, second paragraph for being indefinite. Specifically, the Examiner states that the claims are rejected for the recitation of “said recombinase”. The Examiner asserts that this language permits the interpretation that there are possibly two distinct recombinases in claim 6. *See*, Office Action at pages 2-3.

The Examiner has also rejected claims 6 and 12-25 for the recitation of “the signal sequences for the first nucleic acid and the second nucleic acid are not the same sequences.” The Examiner states that it is unclear whether this limitation requires that the signal sequences not be recognized by the same recombinase. *See*, Office Action at pages 6-7.

Claims 6, 14-15, 18-20 and 25 are amended herein to clarify that the recombinase which contacts the signal sites in both the first and second nucleic acid molecules to mediate excision is encoded by the recombinase gene in the first nucleic acid molecule.

Applicants submit that the amended claims are not indefinite and that the skilled artisan would be readily capable of determining the metes and bounds of these claims. As such, Applicants respectfully request that these rejections be withdrawn.

35 U.S.C. § 102 Rejections

Claims 6, 12, 17-23 and 25 have been rejected under 35 U.S.C. §102(a or e) as being anticipated by Hodges *et al.* U.S. Patent No. 5,929,307 (“Hodges”). Applicants traverse with respect to the claims as amended herein.

Applicants submit that Hodges does not teach all of the limitations of claim 6 as presently amended, and thus, cannot anticipate claim 6, or its dependent claims. Specifically, the present invention requires that the recombinase, which contacts the signal sites in both the first and second nucleic acid molecules to mediate excision, is encoded by the recombinase gene in the first nucleic acid molecule. That is, the same recombinase encoded from the recombinase gene in the first nucleic acid molecule mediates the excision of the target gene in the second nucleic

acid molecule and mediates the excision of the recombinase gene in the first nucleic acid molecule (*i.e.*, self-excision in the first nucleic acid molecule).

According to the Examiner, the construct shown in Figure 1D of Hodges describes all of the limitations of claim 6. Figure 1D of Hodges is reproduced below for the Examiner's convenience.

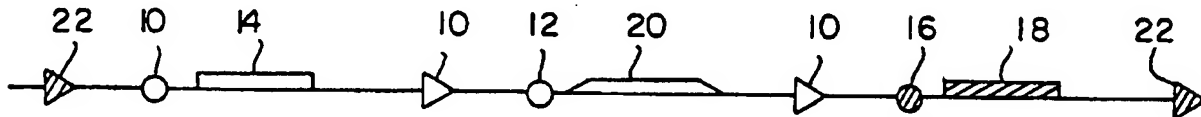


FIG. 1d

As described in the August 7, 2007 Amendment and Response, the Hodges construct describes a nucleic acid molecule with a target gene (20) and signal sequences (10) recognized by the recombinase encoded by the recombinase gene (18). In contrast, to the claimed invention, the recombinase gene (18) in the Hodges construct is not linked to signal sequences (22) recognized by that *same* recombinase. The Hodges construct operates by allowing a plant transformed with this construct to not to be “male sterile”.¹ Specifically, upon induction of the inducible promoter (16), the recombinase gene (18) expresses recombinase which interacts with the signal sequences flanking the target gene (20) which is a restorer gene, removing this gene.² This allows the suicide gene (14) to induce sterility.³ In the Hodges construct, the recombinase encoded by the recombinase gene (18) does not interact with the signal sequences flanking the whole construct (22). In fact, if the recombinase encoded by the recombinase gene (18) also interacted with the signal sequences flanking the whole construct (22), the whole construct would be removed, preventing the expression of the suicide gene (14) and thus rendering a non-sterile male plant and a non-functional construct. Accordingly, Hodges does not teach all of the limitations of the pending claim as amended herein. Applicants request that this rejection be withdrawn.

¹ Hodges at column 9, lines 1-2.

² *Id.* at lines 2-5.

³ *Id.* at column 8, lines 57-58.

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SERIAL NUMBER: 10/789,480

CONCLUSION

On the basis of the foregoing amendment and remarks, Applicants respectfully submit that the pending claims are in condition for allowance and a Notice of Allowance for the pending claims is respectfully requested. If there are any questions regarding this application that can be handled in a phone conference with Applicants' Attorneys, the Examiner is encouraged to contact the undersigned at the telephone number provided below.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Ivor R. Elrifi", is written over a horizontal line.

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